

Claims:

1. (Currently Amended) A method of transmitting an image over a compressed video transport, as part of an image stream, comprising:

determining, by at least one processor, a macroblock of the image, the macroblock being less than the entire image, the macroblock being determined by changes occurring in the macroblock during image generation, wherein the changes occurring in the macroblock comprise differences between a previously transmitted image and a current image;

determining a quality for the macroblock of the image based on a rate of change associated with the macroblock of the image;

transmitting the macroblock of the image at said quality using said transport;

determining that the macroblock of the image did not change in a time period; and

in response to determining that the macroblock of the image did not change in the time period, generating and transmitting a data block of image enhancement data associated with the macroblock of the image, such that the data block improves the quality of the macroblock of the image, wherein the generating and transmitting are not performed in response to determining that the macroblock of the image changed during the time period.

2. (Cancelled)

3. (Previously Presented) A method according to claim 1, wherein said generating comprises generating without decoding previously used DCT coefficients.

4. (Previously Presented) A method according to claim 1, wherein the macroblock of the image does not change in at least 30 frames.

5. (Previously Presented) A method according to claim 1, wherein the macroblock of the image does not change in at least 300 frames.

6. (Previously Presented) A method according to claim 1, wherein the macroblock of the image does not change in at least 5 seconds.

7. (Previously Presented) A method according to claim 1, wherein the macroblock of the image does not change in at least 25 seconds.

8. (Previously Presented) A method according to claim 1, further comprising not transmitting image enhancement data once a target image quality is reached for the macroblock of the image.

9. (Previously Presented) A method according to claim 1, further comprising repeating said generating and said transmitting a maximum of a predetermined number of times for the macroblock of the image.

10. (Previously Presented) A method according to claim 1, wherein said transport comprises an MPEG-type transport.

11. (Previously Presented) A method according to claim 10, comprising decoding said image using a standard MPEG decoder, to have a temporally progressive quality of the macroblock of the image.

12. (Previously Presented) A method according to claim 1, further comprising calculating a synchronization frame for said transport by mapping a representation of said image as transmitted to a representation of said image as it should be in a synchronization frame.

13. (Previously Presented) A method according to claim 1, further comprising associating an indication of a suitable target quality with the macroblock of the image.

14. (Previously Presented) A method according to claim 1, further comprising associating an indication of a suitable initial quality with the macroblock of the image.

15. (Previously Presented) A method according to claim 1, further comprising associating an indication of an expected rate of change with the macro block of the image.

16. (Original) A method according to claim 15, comprising generating said indication by an image generator that generates said image.

17. (Original) A method according to claim 15, comprising generating said indication by an image encoder that encodes said image.

18. (Previously Presented) A method according to claim 15, comprising generating said indication by analyzing a past profile of changes of said macroblock of the image.

19-36. (Cancelled)

37. (Currently Amended) A method of transmitting an image over a compressed video transport, as part of an image stream, comprising:

Identifying, by at least one processor, first and second macroblocks of the image, by utilizing changes occurring in the first and second macroblock during image generation, wherein the changes occurring in the macroblock comprise differences between a previously transmitted image and a current image, wherein:

the first macroblock of the image is distinct from the second macroblock of the image;

the first macroblock of the image has a first original quality level; and

the second macroblock of the image has a second original quality level;

identifying first and second frames of the image stream wherein:

a first data block in the first frame and a first data block in the second frame each correspond to the first macroblock of the image;

a second data block in the first frame and a second data block in the second frame each correspond to the second macroblock of the image;

determining a first macroblock degree of change by comparing the first data block in the second frame to the first data block in the first frame, wherein the first macroblock degree of change provides a quantitative representation of

how different the first macroblock of the image resulting from the second frame is from the first macroblock of the image resulting from the first frame;

determining a second macroblock degree of change by comparing the second data block in the second frame to the second data block in the first frame, wherein the second macroblock degree of change provides a quantitative representation of how different the second macroblock of the image resulting from the second frame is from the second macroblock of the image resulting from the first frame;

encoding a third frame of the image stream based on:

an analysis of the first macroblock degree of change that indicates that the first macroblock of the image did not change between the first and second frames; and

an analysis of the second macroblock degree of change that indicates that the second macroblock of the image did change between the first and second frames;

wherein the third frame comprises:

a first data block that corresponds to the first macroblock of the image; and

a second data block that corresponds to the second macroblock of the image; and

wherein the third frame results in:

the first macroblock of the image having a first new quality level; and
the second macroblock of the image having a second new quality level;
such that an improvement in quality between the first original quality level
and the first new quality level is greater than an improvement in quality between
the second original quality level and the second new quality level.

38. (New) A method according to claim 1, wherein each of the
macroblocks that do not change are periodically polled.